CLAIMS

1. A process for preparing compound of formula (6),

- addition salts, polymorphic and/or pseudopolymorphic forms thereof; characterized in that said process comprises:
 - (i) introducing an isobutylamino group in compound of formula (1)

10 wherein

PG represents an amino-protecting group;

 $\mathbf{R_1}$ is hydrogen or $\mathbf{C_{1-6}}$ alkyl;

- (ii) introducing a p-nitrophenylsulfonyl group in the resultant compound of step (i);
- (iii) reducing the nitro moiety of the resultant compound of step (ii);
- 15 (iv) deprotecting the resultant compound of step (iii); and
 - (v) coupling the resultant compound of step (iv) with a (3R,3aS,6aR)-hexahydrofuro [2,3-b] furan-3-yl derivate.
 - 2. A process according to claim 1 for preparing compound of formula (6),
- characterized in that said process comprises the steps of: introducing an isobutylamino group in compound of formula (1');

to obtain compound of formula (2');

introducing a p-nitrophenylsulfonyl group into compound of formula (2') to obtain compound of formula (3');

reducing the nitro moiety of compound of formula (3') to obtain compound of formula (4');

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

10

5

deprotecting compound of formula (4') to obtain compound of formula (5)

coupling compound of formula (5) with (3R,3aS,6aR)-hexahydrofuro [2,3-b] furan-3-yl derivate to obtain compound of formula (6).

- 3. A process according to any one of claims 1 to 2 wherein step (i) is carried out in toluene.
- 4. A process according to any one of claims 1 to 3 wherein step (ii) is carried out in toluene, ethylacetate, methylene chloride, dichloromethane, or tetrahydrofuran.

5

15

- 5. A process according to any one of claims 1 to 4 wherein step (iii) is carried out in the presence of up to 10 mol % primary or secondary amine, preferably ethanolamine, with palladium on charcoal under a hydrogen atmosphere.
- 6. A process according to any one of claims 1 to 5 wherein step (iv) is carried out in acidic or basic conditions.
- 7. A process according to any one of claims 1 to 6 wherein compound of formula (5) is crystallized by dissolving in a solvent system, adjusting the pH to a value higher than 9 and keeping the concentration of compound of formula (5) in solution in a value between 4% and 15% (w/w).
- 8. A process according to any one of claims 1 to 7 wherein compound of formula (5) is crystallized at a temperature between 0°C and 10°C.
 - 9. A process according to any one of claims 7 to 8 wherein seed crystals of compound of formula (5) are added during crystallization.
- 30 10. A process according to any one of claims 7 to 9 wherein the solvent system comprises one or more water-miscible solvents and water.

Docket No.: TIP-0056USPCT EFS Filing

-33-

11. A process according to any one of claims 7 to 9 wherein the solvent system comprises one or more water-immiscible solvents and water.

- 12. A process according to claim 10 wherein the solvent system is methanol,
 isopropanol, and water in a ratio 1:6.5:8 respectively.
 - 13. A process according to any one of claims 1 to 12 wherein (3R,3aS,6aR)-hexahydrofuro [2,3-b] furan-3-ol or a precursor thereof is reacted with bis-(4-nitrophenyl)carbonate before coupling to compound of formula (5).

10

- 14. A process according to any one of claims 1 to 12 wherein (3R,3aS,6aR)-hexahydrofuro [2,3-b] furan-3-ol or a precursor thereof is reacted with disuccinimidyl carbonate before coupling to compound of formula (5).
- 15 15. A process according to claim 13 or 14 wherein the reaction of (3R,3aS,6aR)-hexahydrofuro [2,3-b] furan-3-ol or a precursor thereof and the carbonic acid derivative is activated by an (amine-) base, preferably triethylamine or pyridine.
- 16. Use of compound of formula (5), addition salts, polymorphic and/or20 pseudopolymorphic forms thereof for the preparation of compound of formula (6).
 - 17. Use of compound of formula (5) according to claim 16, wherein compound of formula (5) is in the form of a free base.
- 25 18. Use of a compound according to any one of claims 1 to 17 as an intermediate for preparing compound of formula (6).